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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,322	01/22/2004	Kevin Beller	SEY-004	8173
26717	7590	01/25/2006	EXAMINER	
RONALD CRAIG FISH, A LAW CORPORATION			FLETCHER, MARLON T	
PO BOX 820			ART UNIT	
LOS GATOS, CA 95032			PAPER NUMBER	
			2837	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,322

Applicant(s)

BELLER, KEVIN

Examiner

Marlon T. Fletcher

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,9,10,12,13 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) 6-8,11,14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,9,10,12,13 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claims 3, 9, and 17, the phrase "such as", "so as", and "such that" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Suggested terms are "wherein" or "which". Terms that are definite should be used to clearly point out whether something "is" or "is not" or something can or can not perform a function. Correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 5, 9, 12, 13, and 16-18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Blucher et al. (5,811,710) in view of Stich (5,789,691).

As recited in claims 1, 17, and 18, Blucher et al. disclose a magnetic pickup for a stringed musical instrument, comprising: magnet means (11, 11') for supplying a magnetic field which envelopes strings of a musical instrument; an upper coil means (21) for sensing fluctuations in a magnetic field caused primarily by said magnet means

and generating an electrical string signal therefrom; a lower coil means (31) for sensing fluctuations in a primarily ambient magnetic field caused by unwanted noise and for generating an electrical noise signal therefrom; connection means for coupling said lower coil means and said upper coil means together so said string signal and said noise signal are summed but are 180 degrees out of phase (figure 4)*, flux transfer means (4) for dividing said magnetic flux Lines in an ambient magnetic field not caused by said magnet means away from said upper coil means and into said Lower coil means so as to cause electrical signals representing noise to be mostly in said electrical noise signal generated by said lower coil means, and for helping concentrate magnetic flux lines from said magnetic field caused by said magnet means so as to cause most of a conversion of magnetic field flux line fluctuation caused by vibration of said strings to electrical signal to occur in said upper coil means. Blucher et al. disclose shielding said upper coil from ambient magnetic field fluctuations not caused by vibrations of said strings, and dividing said ambient magnetic field fluctuations so as to be concentrated in the vicinity of said lower coil (figures 1, 4, and 5)., concentrating magnetic field fluctuations caused by vibrations of said strings (string flux) in said upper coil and shielding said Lower coil from said string flux (figure 4)., and subtracting the signal generated in said Lower coil from the signal generated in said upper coil (column 4, lines 45-54).

As recited in claim 3, Blucher et al. disclose a magnetic pickup for a stringed musical instrument having a plurality of strings, an upper coil form (21) having an upper coil winding wrapped around said upper coil form to form an upper coil', one or more

magnets (11, 11') in the center of said upper coil form and forming a support structure which separates the upper and lower plates (figures 1 and 4); comprising: a lower coil form (31) having a lower coil winding wrapped around said lower coil form; flux transfer plate means (4) for concentrating in the vicinity of said upper coil the magnetic flux generated by said one or more magnets in the center of said upper coil form, and fluctuating in accordance with vibrations of magnetically permeable strings of a stringed instrument, and for dividing ambient magnetic flux lines which are fluctuating in accordance with unwanted noise away from said upper coil and into said lower coil; connection means (figures 1 and 4) for coupling said upper coil to said Lower coil such that an output signal is generated which is the difference between an electrical signal generated in said upper coil and a signal generated in said Lower coil (column 1, Lines 1 1-59).

As recited in claim 9, Blucher et al. disclose the apparatus, further comprising a plurality of ferrous caps placed between a top of said bar magnet and said strings (column 5, lines 1-12).

Blucher et al. do not disclose a lower coil having significantly smaller size and fewer winding than upper coil means.

However Stich discloses a lower coil (20) having significantly smaller size and fewer winding than upper coil means (18) as seen in figure 4 and discussed in column 6, lines 33-38, wherein the either upper or lower can have fewer windings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Stich with Blucher et al., because the

teachings noise or harsh sound cancellation, to thereby eliminate harsh sounds and overtones.

Blucher is discussed above. Blucher et al. (claims 16) disclose a magnetic pickup for a stringed musical instrument, comprising: an upper coil form (2) comprised of first and second plates formed of non ferrous material, each having a plurality of holes therein in which rod magnets may be inserted, said holes aligned so as to hold said rod magnets in parallel relationship when said upper coil form is assembled (figures 1 and 5); an upper coil; a plurality of rod magnets; a lower coil form (3) made of any ferrous or non ferrous, rigid material that can serve as a bobbin around which a coil of wire can be wrapped and having a slot therein', a lower coil winding', a ferrous material slug (column 5, lines 1-12); and flux transfer plates.

Blucher et al. do not disclose an adjustable resistor nor discuss the printed circuit board.

However, Stich (claims 2 and 4) discloses an apparatus, comprising a trim pot adjustable resistor means (60) coupled to said lower coil means for allowing adjustment of the amount of cancellation of noise 'signal in said electrical string signal via summation with an adjustable amount of said electrical noise signal (figure 7). Stich (claim 16) further discloses a printed circuit board for coupling said upper coil to said lower coil such that an output signal is generated which is the difference between an electrical signal generated in said upper coil and a signal generated in said lower coil.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to utilize the teachings of Stich with the apparatus of Blucher et al, because the teachings provide enhancement which allow control of the sound output from the pickup and further provide the inherent circuitry not seen in Bluchler et al.

Claims 5, 12, and 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bluchler et al. Bluchler et al. disclose the claimed invention except for the type of magnets, and type of ferrous material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of these materials in place of the materials used in Blucher et al., since the Examiner takes Official Notice of the equivalence of the different types of material for there use in the musical art and the selection of the any of these known materials would be within the level of ordinary skill in the art. Blucher et al. disclose that the magnets do not extend pass the lower plate (figure 4).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blucher et al. in view Stich as applied to claims 1-4, 5, 9, 12, 13, and 16-18 above, and further in view of Kinman (5,668,520).

Blucher et al. and Stich are discussed above. Blucher et al. and Stich do not disclose a second set of vertical walls.

However, Kinman discloses an apparatus, wherein said flux transfer plate means is comprised of first and second ferrous plates formed so as to have vertical walls which shield the sides of said upper coil winding, and horizontal walls magnetically coupled to said vertical walls which shield said upper coil winding from said Lower coil winding, and

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a second set of vertical walls magnetically coupled to said horizontal walls which guide magnetic flux into a core of said Lower coil winding, and wherein vertical means orthogonal to a plane defined by said strings and horizontal means parallel to a plane defined by said strings (figures 1 and 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the teachings of Kinman with the apparatus of Blucher et al. and Stich, because teachings provide a second set of walls for providing a more desirable sound by separating the coils.

Response to Arguments

6. Applicant's arguments filed 11/04/2005 have been fully considered but they are not persuasive.

The applicant argues that the references do not teach a lower coil having fewer windings than the upper coil. However, Stich discloses the ability to arrange the windings in either formation, wherein the lower coil may have fewer windings or the upper coil may have fewer windings. The applicant argues the use of Stich; arguing that Stich fails to teach humbucking. The applicant fails to claim humbucking. However, humbucking is defined as noise canceling. Stich as discussed above and disclosed in the abstract, provides eliminating or canceling harsh sounding overtones or noise. While applicant's arguments have been considered, they are not persuasive. The claim limitations are met by the combination of references applied above.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

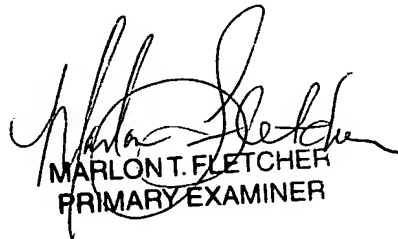
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marlon T. Fletcher whose telephone number is 571-272-2063. The examiner can normally be reached on M-w, F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MTF
January 23, 2006



MARLON T. FLETCHER
PRIMARY EXAMINER